

Title (en)

NICKEL-BASED SUPERALLOY, SINGLE-CRYSTAL BLADE AND TURBOMACHINE

Title (de)

SUPERLEGIERUNG AUF NICKELBASIS, EINKRISTALLINE SCHAUFEL UND TURBOMASCHINE

Title (fr)

SUPERALLIAGE A BASE DE NICKEL, AUBE MONOCRISTALLINE ET TURBOMACHINE

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Application

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Abstract (en)

[origin: CA3081896A1] The invention relates to a nickel-based superalloy comprising, in weight percentages, 4.0 to 5.5 % rhenium, 1.0 to 3.0 ruthenium, 2.0 to 14.0 % cobalt, 0.3 to 1.0 % molybdenum, 3.0 to 5.0 % chromium, 2.5 to 4.0 % tungsten, 4.5 to 6.5 % aluminium, 0.50 to 1.50 % titanium, 8.0 to 9.0 % de tantalum, 0.15 to 0.30 % hafnium, 0.05 to 0.15 % silicon, the rest being nickel and inevitable impurities. The invention also relates to a single-crystal blade (20A, 20B) comprising such an alloy and to a turbomachine (10) comprising such a blade (20A, 20B).

IPC 8 full level

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